IN THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims in the above-referenced application.

1. (Previously Presented) A method of fabricating a set of semiconducting nanowires having a desired wire diameter, the method comprising the steps of:

providing a set of pre-fabricated semiconducting nanowires, at least one pre-fabricated semiconducting nanowire having a wire diameter larger than the desired wire diameter, and

reducing the wire diameter of the at least one pre-fabricated nanowire by etching, the etching being induced by electromagnetic radiation which is absorbed by the at least one pre-fabricated nanowire, a minimum wavelength of the electromagnetic radiation being chosen such that the absorption of the at least one pre-fabricated nanowire being significantly reduced when the at least one pre-fabricated nanowire reaches the desired wire diameter.

2. (Previously Presented) A method as claimed in claim 1, wherein:

a radiation source is used which emits the electromagnetic radiation inducing the etching and electromagnetic radiation having a wavelength shorter than the minimum wavelength, and

the electromagnetic radiation emitted by the radiation source is spectrally filtered for substantially reducing electromagnetic radiation having a wavelength shorter than the minimum wavelength.

3. (Previously Presented) A method as claimed in claim 1, wherein prior to the step of reducing the wire diameter substantially all the pre-fabricated semiconducting nanowires have a diameter larger than or equal to the desired wire diameter.

4. (Previously Presented) A method as claimed in claim 1, wherein the light inducing the etch treatment is linearly polarized along an axis.

5. (Previously Presented) A method as claimed in claim 1, wherein the light inducing the etch treatment has a first component being linearly polarized along a first axis and a second

component being linearly polarized along a second axis forming an angle larger than zero with the first axis.

6. (Original) A method as claimed in claim 5, the first component has a first spectrum with a first minimum wavelength and the second component has a second spectrum with a second minimum wavelength different from the first minimum wavelength.

7. (Original) A method as claimed in claim 5, wherein the first component has a first intensity and the second component has a second intensity different from the first intensity.

8. (Previously Presented) A method as claimed in claim 1, wherein the desired wire diameter comprises zero.

9. (Original) A method as claimed in claim 8, wherein the light inducing etching of nanowires having a desired wire diameter of zero is linearly polarized.

10. (Previously Presented) A method as claimed in claim 1, wherein the pre-fabricated semiconducting nanowires are supported by a substrate.

11. (Previously Presented) A method as claimed in claim 10, wherein the substrate comprises an electrical conductor, the pre-fabricated semiconducting nanowires being electrically conductively connected to the electrical conductor.

12. (Previously Presented) A method as claimed in claim 10, wherein the substrate has a surface constituted by a part supporting the pre-fabricated semiconducting nanowires and another part being free from the part, at least the other part being etch resistant.

13. (Previously Presented) A method as claimed in claim 12, wherein the substrate comprises a first layer which is not etch resistant, and a second layer which is etch resistant, the second layer constituting the other part of the surface.

14. (Previously Presented) A method as claimed in claim 13, wherein the second layer is connected to the first layer by a chemical bond.

15. (Previously Presented) A method as claimed in claim 13, wherein the second layer is composed of one or more materials selected from alkyltriethoxysiloxane and alkyltrimethoxysiloxane.

16. (Previously Presented) A method as claimed in claim 10, wherein the step of providing the pre-fabricated semiconducting nanowires comprises the following sub-steps:

providing the substrate, a surface of the substrate being etchable, and

growing semiconducting nanowires on the surface of the substrate, the grown semiconducting nanowires being the pre-fabricated semiconducting nanowires,

and after the step of providing the pre-fabricated semiconducting nanowires and prior to the step of reducing the wire diameter of the at least one pre-fabricated nanowire by etching the exposed surface of the substrate is covered by an etch resistant layer.

17. (Previously Presented) A method as claimed in claim 10, wherein the pre-fabricated semiconducting nanowires are distributed over the surface, a first part of the surface being irradiated by light for inducing the etch treatment, pre-fabricated semiconducting nanowires in a second part of the surface being prevented from etching.

18. (Previously Presented) A method as claimed in claim 10, wherein the pre-fabricated semiconducting nanowires are distributed over the surface, a first part of the surface area being irradiated by a first light intensity, a second part of the surface free from the first part of the surface being irradiated by a second light intensity smaller than the first light intensity.

19. (Previously Presented) A method as claimed in claim 10, wherein the pre-fabricated semiconducting nanowires are distributed over the surface, a first part of the surface being irradiated by light having a first minimum wavelength, a second part of the surface being irradiated by light having a second minimum wavelength different from the first minimum wavelength.

20. (Currently Amended) A method of manufacturing an electric device comprising a set of nanowires having a desired wire diameter, each nanowire of the set being electrically connected to a first conductor and to a second conductor, the method comprising the steps of:

fabricating the set of semiconducting nanowires having the desired wire diameter ~~according to claim 1~~ by:

providing a set of pre-fabricated semiconducting nanowires, at least one pre-fabricated semiconducting nanowire having a wire diameter larger than the desired wire diameter, and

reducing the wire diameter of the at least one pre-fabricated nanowire by etching, the etching being induced by electromagnetic radiation which is absorbed by the at least one pre-fabricated nanowire, a minimum wavelength of the electromagnetic radiation being chosen such that the absorption of the at least one pre-fabricated nanowire being significantly reduced when the at least one pre-fabricated nanowire reaches the desired wire diameter, and

electrically contacting the nanowires of the set to a first conductor and to a second conductor.

21. (Previously Presented) An electric device comprising a set of semiconducting nanowires, the set comprising a first subset of nanowires each having a first wire diameter and a second subset of nanowires each having a second wire diameter different from the first wire diameter, the nanowires of the first subset being attached to a first part of a substrate, the nanowires of the second subset being attached to a second part of the substrate free from the first part.

22. (Previously Presented) An electric device as claimed in claim 21, wherein the nanowires of the first subset are electrically connected to a conductor, the nanowires of the second subset are electrically connected to a further conductor, the conductor being electrically insulated from the further conductor.

23. (Previously Presented) An electric device as claimed in claim 21, wherein the nanowires comprises a p-doped part and a n-doped part forming a p-n junction.

24. (Previously Presented) An electric device as claimed in claim 23, wherein the n-doped part is electrically connected to a first conductor having a first distance to the p-n junction, the p-doped part is electrically connected to a second conductor having a second distance to the p-n junction smaller than the first distance.

25. (Previously Presented) An electric device as claimed in claim 23, wherein the n-doped part has a wire diameter which is larger than a wire diameter of the p-doped part.

26. (Previously Presented) An apparatus for light induced etching of a set of pre-fabricated semiconducting nanowires, at least one pre-fabricated semiconducting nanowire having a wire diameter larger than a desired wire diameter, the apparatus comprising:

a light source for emitting light inducing the etching of the nanowires, wherein the light is absorbed by at least one of the nanowires, and wherein a minimum wavelength of the light is chosen such that the absorption of the at least one nanowire is significantly reduced when the at least one nanowire reaches the desired diameter; and

a monitor unit for monitoring a light signal emitted by the nanowires during the etching, the light signal being indicative for the wire diameter of the nanowires.

27. (Previously Presented) An apparatus as claimed in claim 26, further comprising a system control unit 36 for controlling the light source in dependence of the light signal monitored by the monitor unit.

28. (Previously Presented) An apparatus as claimed in claim 26, further comprising a polarizer for polarizing the light inducing the etching.

29. (Previously Presented) An apparatus as claimed in claim 26, further comprising an optical element for rotating a polarization of the light inducing the etching.